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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,073	09/24/2003	Jon Thorson	054030-0040	6781
31096	7590	03/29/2006	EXAMINER	
GODFREY & KAHN, S.C. 780 N. WATER STREET MILWAUKEE, WI 53202			PRATS, FRANCISCO CHANDLER	
			ART UNIT	PAPER NUMBER

1651

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/670,073

Applicant(s)

THORSON, JON

Examiner

Francisco C. Prats

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-43 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

**DETAILED ACTION**

Claims 1-43 are presented for examination.

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-7, drawn to a synthetic method using a single glycosyltransferase-catalyzed step, classified in class 435, subclass 97.
- II. Claims 8-15, drawn to a synthetic method using two glycosyltransferase-catalyzed steps, classified in class 435, subclass 97.
- III. Claim 16, drawn to a synthetic method using more than two glycosyltransferase-catalyzed steps, classified in class 435, subclass 97.
- IV. Claim 17, drawn to a glycoside compound, classified in class 536, subclass 4.1.
- V. Claims 18-22, drawn to a second synthetic method using a single glycosyltransferase-catalyzed step, classified in class 435, subclass 97.
- VI. Claims 23-25, drawn to a second synthetic method using two glycosyltransferase-catalyzed steps, classified in class 435, subclass 97.

- VII. Claim 26, drawn to a second glycoside compound,  
classified in class 536, subclass 4.1.
- VIII. Claims 27, 28 and 30-32, drawn to a synthetic method  
using a chemoselective ligation step and a single  
glycosyltransferase-catalyzed step, classified in  
class 435, subclass 97.
- IX. Claim 29, drawn to a synthetic method using a  
chemoselective ligation step and two  
glycosyltransferase-catalyzed steps, classified in  
class 435, subclass 97. As an aside note that claim  
29 depends from itself.
- X. Claim 33, drawn to a third glycoside compound,  
classified in class 536, subclass 4.1.
- XI. Claim 34, drawn to a vancomycin derivative, classified  
in class 536, subclass 16.8.
- XII. Claim 35, drawn to a second vancomycin derivative,  
classified in class 536, subclass 16.8.
- XIII. Claim 36, drawn to a third vancomycin derivative,  
classified in class 536, subclass 16.8.
- XIV. Claim 37, drawn to a fourth vancomycin derivative,  
classified in class 536, subclass 16.8.

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- XV. Claim 38, drawn to a fifth vancomycin derivative, classified in class 435, subclass 16.8.
- XVI. Claim 39, drawn to a sixth vancomycin compound, classified in class 536, subclass 4.1.
- XVII. Claim 40, drawn to a seventh vancomycin derivative, classified in class 536, subclass 16.8.
- XVIII. Claim 41, drawn to an eighth vancomycin derivative, classified in class 536, subclass 16.8.
- XIX. Claim 42, drawn to a ninth vancomycin derivative, classified in class 536, subclass 16.8.
- XX. Claim 43, drawn to a method of reducing or preventing bacterial infection, classified in class 514, subclass 25. As an aside note that claim 43 depends from itself.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-III, V, VI, VIII and IX are related to inventions IV, VII and X-XIX as processes of making and products made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant

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case the processes as claimed can be used to make other and materially different products, as evidenced by the open "comprising" language in the claims, which encompasses modifications of the claimed processes so as to result in products substantially different than those claimed. Moreover, the products claimed can be made by materially different process, such as non-enzymatic syntheses.

Although there are no provisions under the section for "Relationship of Inventions" in MPEP § 806.05 for inventive groups that are directed to different methods, restriction is considered to be proper because the following methods constitute patentably distinct inventions for the following reasons: Groups I-III, V, VI, VIII, IX and XX are directed to methods that are distinct both functionally and physically, and are not required one for the other. The various groups require different steps and materials, including the use of different starting materials to produce different end products. Moreover, the therapeutic method has no step in common whatsoever with any of the synthetic methods. Therefore, a search and examination of all methods in one patent application would result in an undue burden, since the searches for the methods are not co-extensive, the classification is different, and the subject matter is divergent.

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Inventions IV, VII and X-XIX are directed to related products. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, each of the claimed compounds necessarily has a different structure, and therefore has different properties, i.e. different modes of operation, function and effect.

Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

This application contains claims directed to the following patentably distinct species:

- (a) the compounds recited in claim 1 (moieties 34-64);
  - (b) the glycosylated moieties recited in claim 4;
  - (c) the glycosyltransferases recited in claim 6;
  - (d) the various compounds encompassed by claim 17
- (applicant must elect a specific compound explicitly stating the structure of said compound);

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(e) compounds recited in claim 18 (moieties 101-125);

(f) the glycosylated moieties recited in claim 19;

(g) the glycosyltransferases recited in claim 22;

(h) the various compounds encompassed by claim 26

(applicant must elect a specific compound explicitly stating the structure of said compound);

(i) the chemoselectively ligatable moieties recited in claim 27 (i.e. moieties 65-80 and 131-145);

(j) the glycosylated moieties recited in claim 30;

(k) the various compounds encompassed by claim 26

(applicant must elect a specific compound explicitly stating the structure of said compound);

(l) the compounds to be used in the therapeutic method recited in claim 43.

The species are independent or distinct because they recite compounds having different structures, and therefore different properties.

Depending which of the groups I-XX above is elected by applicant, applicant is **also required** under 35 U.S.C. 121 to elect a single disclosed species **from each of (a) through (l) above**, which corresponds to the first election of groups I-XX above, for prosecution on the merits to which the claims shall



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be restricted if no generic claim is finally held to be allowable.

Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

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The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35

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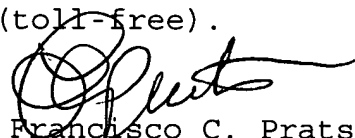
U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Francisco C. Prats whose telephone number is 571-272-0921. The examiner can normally be reached on Monday through Friday, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Francisco C. Prats  
Primary Examiner  
Art Unit 1651

FCP